



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/667,072	09/21/2000	Jin Soo Lee	P-128	9016
34610	7590	03/04/2004	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			TRAN, PHILIP B	
			ART UNIT	PAPER NUMBER
			2155	10

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/667,072

Applicant(s)

LEE ET AL.

Examiner

Philip B Tran

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3 and 9.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1 and 7 are objected to because of the following informalities:

In claim 1, lines 1 and 3, "an user profile" should be "a user profile".

In claim 1, lines 2 and 3, "an user-preferred application" should be "a user-preferred application".

In claim 7, line 5, "an user profile" should be "a user profile".

In claim 7, line 5, "an user preference" should be "a user preference".

In claim 7, line 6, "an user-preferred multimedia" should be "a user-preferred multimedia".

Appropriate corrections are required.

Claim Rejections - 35 U.S.C. § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 7-9 and 11-12 are rejected under 35 U.S.C. § 102(e) as being anticipated by Sezan et al (Hereafter, Sezan), U.S. Pat. No. 6,236,395.

Regarding claim 1, Sezan teaches in a content-based multimedia data browsing (i.e., managing audiovisual information for audiovisual information browsing) [see Col.

1, Lines 7-11], an user profile information data structure comprises an user-preferred application description scheme (= user description scheme, with user preferences section includes browsing preferences and user history section includes browsing history) for browsing in an user profile (= user identity, preferences, and usage history) in order to provide an user-preferred multimedia browsing method (i.e., a user description scheme provides information regarding the user's preferences for using in combination with other description schemes to enhance ability to search and browse audiovisual information in a personalized and effective manner) [see Abstract and Col. 1, Lines 55-67 and Col. 5, Line 37 to Col. 6, Line 22 and Col. 21, Line 30 to Col. 24, Line 11].

Regarding claim 2, Sezan further teaches the user profile information data structure of claim 1, wherein the user-preferred application description scheme stored in the user profile is an application ID, or application locator (i.e., for each category of, the preferred views are specified by the descriptor <View – Category> with an ID attribute which corresponds to the category ID [see Col. 22, Lines 5-25 and Col. 23, Lines 10-22] and source location or location of a program in URL format [see Col. 15, Lines 20-34]).

Regarding claim 3, Sezan further teaches the user profile information data structure of claim 2, wherein the application description scheme stored in the user profile further comprises a layout description scheme of applications (i.e., structure of user description scheme, with user preferences section includes browsing preferences

and user history section includes browsing history for recording some statistics which reflects certain usage patterns of the user) [see Col. 21, Line 30 to Col. 24, Line 11].

Regarding claim 7, Sezan teaches in content-based multimedia data browsing, a multimedia data browsing method (i.e., managing audiovisual information for audiovisual information browsing) [see Col. 1, Lines 7-11], characterized in that :

(a) multimedia data contains a contents description scheme (= program description scheme) used in indexing/browsing multimedia data (i.e., program description scheme with video, image, and/or audio information (program) which are useful in browsing application) [see Col. 4, Line 40 to Col. 5, Line 36 and Col. 14, Lines 45-50];

(b) an user profile includes an user preference description scheme (= user description scheme, user preference section) indicating an user-preferred multimedia browsing method or browsing criterion for user-preferred browsing (i.e., user description scheme includes user preference section for recording a number of settings which may be preferred by the user) [see Col. 21, Line 30 to Col. 23, Line 7]; and

(c) multimedia data is browsed by analyzing the user-preferred application description scheme (= user description scheme, with user preferences section includes browsing preferences and user history section includes browsing history) for user-preferred browsing in a corresponding user profile (= user identity, preferences, and usage history), if the user desires multimedia browsing (i.e., a user description scheme provides information regarding the user's preferences for using in combination with

other description schemes to enhance ability to search and browse audiovisual information in a personalized and effective manner) [see Abstract and Col. 1, Lines 55-67 and Col. 5, Line 37 to Col. 6, Line 22 and Col. 21, Line 30 to Col. 22, Line 34].

Regarding claim 8, Sezan further teaches the method of claim 7, wherein the user-preferred multimedia data browsing method or browsing criterion are described differently according to the type or genre of multimedia data, and the multimedia data is browsed according to the corresponding description scheme indicating each user-preferred browsing method or browsing criterion (i.e., the user description scheme 20 preferably includes the user's personal preferences, and information regarding the user's viewing history such as browsing history wherein the user's personal preferences includes information regarding particular programs and categorizations of programs that the user prefers to view [see Col. 5, Line 37 to Col. 6, Line 22]. In addition, the user description scheme is a major enabler for personalizable audiovisual appliances which access multiple or different types of single media such as video, music, etc. [see Col. 11, Lines 7-49 and Col. 12, Lines 1-16]). This suggests that the user-preferred multimedia data browsing method or browsing criterion are described differently according to the type or genre of multimedia data.

Regarding claim 9, Sezan further teaches the method of claim 7, wherein the user-preferred multimedia browsing method or browsing criterion is represented as a character-oriented browsing, character/place relation-oriented browsing, time sequential

and scene-oriented browsing, or combination thereof (i.e., the user preferred views are specified such as at what interval the frames and shots should be displayed on the browsing slider) [see Figs. 4-12 and Col. 22, Lines 5-34 and Col. 23, Lines 8-25].

Regarding claim 11, Sezan further teaches the method of claim 7, wherein an application satisfying the user-preferred browsing method or browsing criterion is executed the locator description scheme of the corresponding application, in displaying the corresponding multimedia data (i.e., for each category of, the preferred views are specified by the descriptor <View – Category> with an ID attribute which corresponds to the category ID [see Col. 22, Lines 5-25 and Col. 23, Lines 10-22] and source location or location of a program in URL format [see Col. 15, Lines 20-34]).

Regarding claim 12, Sezan further teaches the method of claim 11, wherein, if the proper application for browsing does not exist in the terminal, the corresponding application is downloaded (i.e., the audiovisual program 38 is received by the system 16 and the program related information (descriptor) may be extracted from the data stream including the program 38 or obtained from any other source) [see Col. 7, Line 55 to Col. 8, Line 29] using the locator description scheme (i.e., for each category of, the preferred views are specified by the descriptor <View – Category> with an ID attribute which corresponds to the category ID [see Col. 22, Lines 5-25 and Col. 23, Lines 10-22] and source location or location of a program in URL format [see Col. 15, Lines 20-34]).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 4-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan et al (Hereafter, Sezan), U.S. Pat. No. 6,236,395 in view of Zhu et al (Hereafter, Zhu), U.S. Pat. No. 6,345,274.

Regarding claim 4, Sezan further teaches the user profile information data structure of claim 1, wherein the number of user-preferred application description schemes stored in the user profile may be plural (i.e., the descriptor <browsing

preference> specifies the browsing preferences of a user and there are a plurality of the user's preferred views of a plurality of categories) [see Sezan, Col. 22, Lines 5-34]:

Sezan does not explicitly teach each of the application description schemes comprises a weight for describing user preference. Zhu, in the same field of multimedia content processing and retrieval endeavor, discloses the use of weight value in description scheme [see Zhu, Col. 1, Line 25 to Col. 2, Line 12 and Col. 6, Lines 4-35]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of weight value in description scheme, disclosed by Zhu, into user-preferred application description scheme stored in the user profile disclosed by Sezan in order to indicate user preferences regarding the relative importance of that features such as color, texture, structure and composition for processing a query [see Zhu, Col. 2, Lines 5-19]. Thus, multimedia contents can be efficiently browsed and retrieved in priority manner based on the ranking of objects predefined by user preferences.

Regarding claim 5, Sezan further teaches the user profile information data structure of claim 1, wherein the user-preferred application description scheme stored in the user profile may be a plurality of application description schemes which are different from one another according to the type (genre) of a multimedia data object (i.e., the user description scheme 20 preferably includes the user's personal preferences, and information regarding the user's viewing history such as browsing history wherein the user's personal preferences includes information regarding particular programs and

categorizations of programs that the user prefers to view [see Sezan, Col. 5, Line 37 to Col. 6, Line 22]. In addition, the user description scheme is a major enabler for personalizable audiovisual appliances which access multiple or different types of single media such as video, music, etc. [see Sezan, Col. 11, Lines 7-49 and Col. 12, Lines 1-16]). This suggests that the user-preferred multimedia data browsing method or browsing criterion are described differently according to the type or genre of multimedia data.

Sezan does not explicitly teach each of the application description schemes comprises a weight describing user preference corresponding to an user feedback. Zhu, in the same field of multimedia content processing and retrieval endeavor, discloses the use of weight value in description scheme [see Zhu, Col. 1, Line 25 to Col. 2, Line 12 and Col. 6, Lines 4-35]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of weight value in description scheme, disclosed by Zhu, into user-preferred application description scheme stored in the user profile disclosed by Sezan in order to indicate user preferences regarding the relative importance of that features such as color, texture, structure and composition for processing a query [see Zhu, Col. 2, Lines 5-19]. Thus, multimedia contents can be efficiently browsed and retrieved in priority manner based on the ranking of objects predefined by user preferences.

Regarding claim 6, Sezan further teaches the user profile information data structure of claim 5, wherein each of the user-preferred application description schemes

is structured hierarchically (i.e., user browsing preferences and user filtering preferences structures with one item on top of another one) [see Sezan, Col. 22, Line 5 to Col. 24, Line 11].

Sezan does not explicitly teach each part of the description schemes has a weight describing user preference. Zhu, in the same field of multimedia content processing and retrieval endeavor, discloses the use of weight value in description scheme [see Zhu, Col. 1, Line 25 to Col. 2, Line 12 and Col. 6, Lines 4-35]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of weight value in description scheme, disclosed by Zhu, into user-preferred application description scheme stored in the user profile disclosed by Sezan in order to indicate user preferences regarding the relative importance of that features such as color, texture, structure and composition for processing a query [see Zhu, Col. 2, Lines 5-19]. Thus, multimedia contents can be efficiently browsed and retrieved in priority manner based on the ranking of objects predefined by user preferences.

Regarding claim 10, Sezan further teaches the method of claim 8, wherein the number of browsing methods or browsing criteria described differently according to the type of multimedia data is at least more than one with respect to one type (genre) thereof (i.e., the user description scheme 20 preferably includes the user's personal preferences, and information regarding the user's viewing history such as browsing history wherein the user's personal preferences includes information regarding

particular programs and categorizations of programs that the user prefers to view [see Sezan, Col. 5, Line 37 to Col. 6, Line 22]. In addition, the user description scheme is a major enabler for personalizable audiovisual appliances which access multiple or different types of single media such as video, music, etc. [see Sezan, Col. 11, Lines 7-49 and Col. 12, Lines 1-16]). This suggests that the number of browsing methods or browsing criteria described differently according to the type of multimedia data is at least more than one with respect to one type (genre) thereof.

Sezan does not explicitly teach weighted values can be added on each of the browsing methods or browsing criteria, thus analyzing the user-preferred application. Zhu, in the same field of multimedia content processing and retrieval endeavor, discloses the use of weight value in description scheme [see Zhu, Col. 1, Line 25 to Col. 2, Line 12 and Col. 6, Lines 4-35]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the use of weight value in description scheme, disclosed by Zhu, into user-preferred application description scheme stored in the user profile disclosed by Sezan in order to indicate user preferences regarding the relative importance of that features such as color, texture, structure and composition for processing a query [see Zhu, Col. 2, Lines 5-19]. Thus, multimedia contents can be efficiently browsed and retrieved in priority manner based on the ranking of objects predefined by user preferences.

Other References Cited

6. The following references cited by the examiner but not relied upon are considered pertinent to applicant's disclosure.

A) Huang et al, U.S. Pat. No. 6,593,936, discloses audiovisual content description scheme.

B) Lin et al, U.S. Pat. No. 6,546,135, discloses multimedia content description scheme.

C) Vaithilingam, U.S. Pat. No. 6,411,724, discloses using meta-descriptors to represent multimedia information.

D) Legall et al, U.S. Pat. No. 6,005,565, discloses integrated search of electronic program guide, internet and other information resources.

E) Hu et al, "MD²L : Content Description of Multimedia Documents for Efficient Process and Search/Retrieval", IEEE, May 19-21, 1999, discloses multimedia content description scheme.

7. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTHS, OR THIRTY DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. FAILURE TO RESPOND WITHIN THE PERIOD FOR RESPONSE WILL CAUSE THE APPLICATION TO BECOME ABANDONED (35 U.S.C. § 133). EXTENSIONS OF TIME MAY BE OBTAINED UNDER THE PROVISIONS OF 37 CAR 1.136(A).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (703) 308-8767. The Group fax phone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached on (703) 308-6662.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Philip Tran

Philip B. Tran
Art Unit 2155
February 26, 2004